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10/753,450

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT

PAPER NUMBER

2627

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/753,450	<b>Applicant(s)</b> TATEISHI ET AL.	
	<b>Examiner</b> Aristotelis M. Psitos	<b>Art Unit</b> 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17 is/are pending in the application.
- 4a) Of the above claim(s) 3-9, 11 and 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 10, 12, 14, 15, 17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

Applicants' response of 1/18/08 has been considered with the following results.

#### ***Specification***

The amendment to the title of the invention is accepted; however, because there is a limit as to the length, applicants' will have to shorten such.

#### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claims 1,10,12 and 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the examiner does not accept the changes, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

In particular the ability of switching between an erase pulse of multi-pulses and a single pulse is not found in the figures. Although figure 4a and 4b are so interpreted, how/where the switching is performed in the predetermined time and other than the predetermined time is not depicted.

Furthermore, how the control performs such "on its own" as recited in claim 17 is not depicted in any of the figures. The controller is not a single element, but part of the system.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. Claim 17 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In particular, although the disclosure alludes to permitting the system “on its own” to determine the predetermined time period, how/what/where the controller performs such “on its own” is not found to any degree of specificity for one of ordinary skill in the art to make and use the invention.

No art can be developed against this claim, since there is insufficient disclosure as to what it is that applicants’ have invented.

As far as the claims recite positive limitations, the following art rejections are made.

2. Claims 1,2,10,12,14, and 15 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for that as found with the description of figure 6 does not reasonably provide enablement for the single erase pulse as claimed. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims.

As described with respect to figure 6 and its disclosure, the erase pulses are emitted as single pulses – not an erase pulse as a single pulse. – see below rejection with respect to paragraph 2 of 35 USC 112.

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### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1,2,10,12,14, and 15 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

In particular, the independent claims recite:

"...and wherein the emission device emits the erase beam of the single-pulse beam during the predetermined period, and emits the erase beam -pulse beam during a period other than the predetermined period;... '.

However, the examiner cannot readily map this with the remainder of the specification.

As described with respect to figure 6 and its disclosure, the erase pulses are emitted as single pulses – not as a single pulse. Hence the claims fail to agree with the disclosure.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re*

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*Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1,2,10,12 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10/4 and 16/14 (with respect to the product claim 12) of U.S. Patent No. 7109462 in view of claim 9 of the same patent.

Claim 10/4 and 16/14 are relied upon for the reasons stated in the previous OA.

With respect to the ability of the "erase" pulse to be switched at appropriate times, such a concept is taught in claim 9 of the patent.

Note the claim recites the erase pulse to be generated (emitted) at an appropriate intensity level during erasure and that such is one of the processes of the control device. Using the specification as a dictionary, the processing of the erase pulse(s) are depicted described with respect to figure 6 for instance, and hence as far as the examiner understands the terminology - see the above rejections predicated upon such phraseology in paragraphs 2 & 3.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

5. Claims 1,2,10,12 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10/4 and 16/14 (with respect to the product claim 12) of U.S. Patent No. 7109462 in view of Maeda et al and further considered with Abe et al.

The divergence of the claimed subject matter is not patentable distinct, since as claimed herein the invention is drawn to a combination of rec/repr and erasing functions (as defined) between multi-pulse

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and single pulse(s). . The previous patent, especially claim 10/4 provides for the ability of the multi-pulse and single pulse recording. The claims fail to depict any erasing capability.

The Maeda et al and Abe et al prior art systems are drawn to erasing as well as recording capabilities, wherein multiple erasing pulses are provided for - in Maeda et al – see his discussion with respect to figure starting at col.2 line 25 and continuing till at least col. 34 line 20, as an improvement over a single pulse erasing ability.

Abe et al depicts a single pulse erasing capability – see the depiction/explanation with respect to figures 3 and 16 (erase pulse) of various time lengths.

The present claimed invention would have been an obvious modification using the above additional teachings from both Maeda et al and Abe et al to also use a switching ability between multiple and single erase pulse(s) for the reasons identified/discussed in the above secondary systems.

Method claim 10 is met, i.e., obvious equivalent to the above apparatus claims.

The limitations of claim 14 are present/ different levels between the multi-pulse writing and multi-pulse erasing beams – by definition such difference levels must exist, else one is neither writing nor erasing.

### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicants' continue to conclude that there is no suggestion or teaching to combine the above noted teachings from Maeda et al and Abe et al into the base system.

The examiner respectfully disagrees.

As indicated in Maeda et al – a multi-pulse erase system (figures 6D1 & 9D1) as well as a single pulse erase system (figure 8D1). The single beam is used when the focusing is not as crucial to ensure

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erasure of the previously recorded information, i.e., those areas, such as APC, wherein the focusing of the system need not be as critical as other - such as data areas.

Similarly, Abe et al also depicts a single erase beam – see the description with respect to figure 3, and multi-pulses – see the description with respect to figure 16.

6. Claims 15 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10/4 of U.S. Patent No. 7109462 in view of claim 9 of the patent.

a) themselves with respect to claim 15 – i.e., the apc is considered the predetermined time period of the above parent patent claim;

b) alternatively claim 15 is further obvious in view of Masui et al, the use of apc timing for generating the sampling periods/ i.e., the predetermined time periods.

#### ***Response to Arguments***

Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection of the parent claim.

7. Claims 15 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 10/4 of U.S. Patent No. 7109462 in view of Maeda et al & Abe et al as relied upon above in paragraph 5 and further considered with:

a) themselves with respect to claim 15 – i.e., the apc is considered the predetermined time period of the above parent patent claim;

b) alternatively claim 15 is further obvious in view of Masui et al, the use of apc timing for generating the sampling periods/ i.e., the predetermined time periods and

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 1,2 10,12 and 14 rejected under 35 U.S.C. 103(a) as being unpatentable over Yokoi further considered with Maeda et al & Abe et al.

Yokoi discusses – as is recognized in the submitted IDS with respect to the previous search report – (see the discussion with respect to EP 1207525) –i.e., the US equivalent document thereof – a multi-pulse and single pulse capability with the appropriate timing and switching there between. There is no clear depiction that such can also be used for the erasing capability, however, as discussed above in paragraph 5 with respect to the secondary references, such is so taught/recognized by these systems.

It would have been obvious to modify the base system of Yokoi with the above additional teachings from both Maeda et al and Abe et al, motivation is to provide for an analogous switching

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between multi-pulses and single pulse for erasing as well as writing capabilities for the discussed advantages in the secondary systems.

The product limitations of claim 12 are present when providing such a product for a computer environment/system.

The limitations of claim 14 are self evident and present in the above references, i.e., different levels for the writing and erasing pulse(s).

### ***Response to Arguments***

Applicant's arguments filed 1/18/08 have been fully considered but they are not persuasive.

As indicated in Maeda et al – a multi-pulse erase system (figures 6D1 & 9D1) as well as a single pulse erase system (figure 8D1). The single beam is used when the focusing is not as crucial to ensure erasure of the previously recorded information, i.e., those areas, such as APC, wherein the focusing of the system need not be as critical as other - such as data areas.

Similarly, Abe et al also depicts a single erase beam – see the description with respect to figure 3, and multi-pulses – see the description with respect to figure 16.

It would have been obvious to modify the base system with such teachings either as indicated in Maeda et al switching between areas where the focusing is not critical, or as indicated in Abe et al, in order to increase the writing capability of the overall system.

9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over the art as applied to claims 1,2,10,12, and 14 as stated in paragraph 8 above, and further in view of Masui et al.

With respect to the capability of having the apc as providing a basis for the predetermined time period as the sampling signal of the emitting device, such is further taught by the Masui et al system.

Use of the apc timing as the timing in the above system is considered an obvious modification, i.e., selection of appropriately provided regions for sampling signals is well known and the correlation between the apc period as such is merely a selection between equivalent sources for sampling, in the disc arts.

***Response to Arguments***

Applicant's arguments filed 1/18/08 have been fully considered but they are not persuasive. The dependent claim falls with its' parent claim for the reasons stated therewith.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Shigemori – see the erase pulse described in figure 3.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-Thur: 6:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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